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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,623	03/21/2000	KLAUS-LEO WILBUER	SWR-0004	2649

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EXAMINER

CHAMBERS, TROY

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 04/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/446,623

Applicant(s)

WILBUER ET AL.

Examiner

Troy Chambers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 20 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Specifically, claims 1 and 13 contains the phrase "wherein contacting is achieved by providing a *relative movement* between the surface to be coated of the shielding element and the dispersion bath". However, a "whereby" (or "wherein") clause is proper when it merely describes a function, operation, or result that necessarily follows from the previously recited structure or method. "Providing a relative movement" does not necessarily follow "contacting a surface". This is referred to as inferential claiming and it is improper. Hence, applicant must positively recite "providing a relative movement" and then applicant may describe this movement in relation to the previously recited steps, if desired.

4. Claim 11 recites the "time to time" limitation rejected in the previous office action.

5. Claim 1 recites "at least *one of boron*". It is unclear what *one* refers to.

6. Claim 3 recites the limitation "face up". It is unclear what "face" applicant is referring to since it has not been positively recited in claim 1.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4238299 issued to Wang in view of EPO Publication EP 55679 issued to Baburek. Wang discloses a process for coating a shielding element with a boron copper layer. However, Wang does not disclose expressly that his method is applicable to deposition boron nickel particles.

Baburek discloses a method for coating a shielding element with a boron-nickel layer (page 3, ll. 10-12 and 34-36).

3. With respect to claims 1 and 13, it would have been obvious to one having ordinary skill in the art to apply the coating method of Wang using the materials disclosed in Baburek. The suggestion/motivation for doing so would have been to agitate the copper boron electrolyte solution thereby achieving an even distribution (Wang, col. 3, ll. 19-40).

4. With respect to claim 2, see Wang, col. 4, ll. 48-59.

5. With respect to claim 3, see Wang, col. 4, ll. 12-17.

6. With respect to claim 4, see Wang, col. 3, ll. 19-22

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7. With respect to claim 5, one having ordinary skill in the art would find it obvious to remove the carbon element from the boron carbon compound. Removing the carbon element would eliminate the abrasive properties of the boron carbon compound but would physically allow more boron to be embedded in another metal as a result of the increase in molecular spacing.
8. With respect to claim 6, Baburek discloses a method for coating a shielding element with a boron-nickel layer using a plasma torch (Abst.).
9. With respect to claim 7, Wang discloses electrolytic boron carbide deposition (Abst.).
10. With respect to claim 8, the combined disclosures of Wang and Baburek anticipate claim 1 and therefore would inherently obtain a coating of the thickness claimed by the Applicant.
11. With respect to claims 9, 10, 13 and 14, see Wang, col. 1, ll. 20-22.
12. With respect to claim 11, see Wang, col. 2, ll. 19-22.
13. With respect to claim 12, see Wang, col. 2, ll. 58-61.

Response to Arguments

Applicant argument for patentability over the cited prior art relies on the "relative movement" limitation. But, as explained above, this limitation is not positively recited. However, even if the limitation was added in accordance with 35 U.S.C. 112(2) applicant's method continues to be anticipated by the cited prior art. As admitted by the applicant, Wang discloses "Boron carbide particles 26 are introduced through funnel 14

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while agitating the electrolyte solution with the stirrers 16.” This is equivalent to applicant’s “relative movement” limitation. If there were no stirring of the solution the compounds would merely fall to the bottom of the basin in response to gravity. One of ordinary skill in the art would recognize that the stirring motion is to evenly disperse the compound within the bath.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Troy Chambers whose telephone number is (703) 308-

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5870. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone, can be reached at (703) 306-4198.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-4177. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4195.


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